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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 10/038,451  | 01/03/2002  | Masaya Okita         | Soyu C4B             | 8378             |
| 7590  | 12/12/2005  |                      | EXAMINER             |                  |
| Flynn, Thiel, Boutell & Tanis, P.C.<br>2026 Rambling Road<br>Kalamazoo, MI 49008-1699 |             |                      | NELSON, ALECIA DIANE |                  |
|   |             |                      | ART UNIT             | PAPER NUMBER     |
|   |             |                      | 2675                 |                  |
| DATE MAILED: 12/12/2005   |             |                      |                      |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/038,451             | OKITA, MASAYA       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Alecia D. Nelson       | 2675                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 March 2005.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 30-36 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 30-36 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/6/05.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 05/06/05 have been considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. ***Claim 32*** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There fails to be any description in the specification as originally filed that the constant voltage erases the image displayed on the nematic liquid crystal panel.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 30-33, 35, and 36** are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. (U.S. Patent No. 4,795,239).

With reference to **claim 30**, Yamashita et al. teaches a method of displaying images on a liquid crystal display device (11) configured to display images by applying image-responsive voltages ( $S1'$ - $Sm'$ ) corresponding to image data (COM') to a matrix-type nematic liquid crystal panel while applying selection pulses (G1'-G2'), comprising: applying a voltage corresponding to image data ( $S1'$ - $Sm'$ ) to the nematic liquid crystal panel while applying a first selection pulse (G1) in each frame period; and applying a constant voltage (VITO) independent from the image data to the nematic liquid crystal panel while applying a second selection pulse (G2) in each said frame period (see Figure 2).

With reference to **claim 31**, Yamashita et al. teaches that the matrix liquid crystal panel is a TFT liquid crystal panel (see Figure 1, column 2, lines 36-51).

With reference to **claims 32 and 33**, Yamashita et al. teaches that the voltage applied for erasing or displaying black, as being applied at intervals where the voltage corresponding to the image data is applied, this voltage will display black to the segment electrode being that it is a non-displaying voltage. This thereby erasing the image on the panel or returning the liquid crystal to a predetermined state (non-display state) (see Figure 2).

With reference to **claim 35**, Yamashita et al. teaches a method of displaying images corresponding to image data (COM') on a liquid crystal display device (11) including a matrix-type nematic liquid crystal panel (see Figure 1), comprising the steps of: applying a voltage corresponding to image data (S1'-Sm') to the nematic liquid crystal panel during a first time zone (first portion of the frame, including the ending of the previous frame) of a first frame period; applying a first selection pulse (G1') during a portion of the first time zone of the first frame period during the application of the voltage corresponding to image data; applying a constant voltage (VITO) independent from the image data to the nematic liquid crystal panel during a second time zone (ending portion of the frame, extending into the next frame) of the first frame period, the second time zone beginning after the first time zone, the sum of the first and second time zones comprises the entire first frame period; applying a second selection pulse (G2') during a portion of the second time zone of the first frame period during the application of the constant voltage (VITO) independent from the image data; and repeating the above steps during each subsequent frame period (see Figure 2).

With reference to **claim 36**, Yamashita et al. teaches that the first selection pulse (G1') and the second selection pulse (G2') each have a positive voltage value, and wherein the second selection pulse does not occur immediately after the first selection pulse (see Figure 2).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. ***Claim 34*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. as applied to ***claim 30*** above, and further in view of Miyawaki (U.S. Patent No. 5,777,594).

With reference to ***claim 30***, Yamashita teaches all that is required as explained above, however fails to specifically teach that the liquid crystal display device comprises a combination of nematic liquid crystal and backlight elements of three colors including red, green, and blue. However, the usage of such a backlight device in liquid crystal display device is well known to those skilled in the art.

Moreover, Miyawaki teaches a liquid crystal display apparatus comprising a combination of a nematic liquid crystal (7) and backlight (19) elements of three colors including Red, Green, and Blue (see column 2, lines 55-62).

Therefore it would have been obvious to one having ordinary skill in the art to allow the usage of a backlight device including RGB light sources as described in the liquid crystal display device as taught by Miyawaki, in a device similar to that which is taught by Yamashita in order to thereby provide a color image to the user viewing the display device.

***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claims 30-36** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,154,191 (hereinafter '191) and claims 1-4 of U.S. Patent No. 6,424,329 (hereinafter '329). Although the conflicting claims are not identical, they are not patentably distinct from each other because The subject matter claim in **claims 30-36** of the instant application is fully disclosed in claims 1-2 of patent '191, and the subject matter in **claims 30-36** of the instant application is fully disclosed in claims 1 and 3 of patent '329 claiming the common subject matter as follows, a system for driving a matrix nematic liquid crystal in a liquid crystal display device comprising means for applying a sequence of selection pulses to the common electrode, means responsive to the selection pulses to apply to the segment electrode a voltage having a value corresponding to image data to be displayed, and means for changing the value of the voltage applied to the segment electrode during intervals where the selection pulses are

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applied so that the value thereof is different from the value corresponding to the image data. Even though the independent claims of the instant application uses different claim language than that of the patent, the claims of the instant application as stated above, and the patents contain common patentable subject matter.

***Response to Arguments***

8. Applicant's arguments with respect to **claims 30-36** have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is 571-272-7771. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adn/ADN  
December 3, 2005



SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER